

LIEBHERR

CONSTRUCTION EQUIPMENT



LIEBHERR LB28 115693 (S/N 115653) - Diesel Engine

Sample No: LH0151087

Oil Type: PETRO CANADA SUPREME 5W30



ESEL Excavation and Shoring Equipment Ltd.
 2208 hartley ave
 COQUITLAM, BC
 CA V3K 6X3
 Contact: Scott MacPherson
 scottm@matcon.com
 T: (604)813-8520
 F:



SAMPLE INFORMATION

Sample Number	LH0151087	LH0221911	LH0215070	---
Sample Date	01 Nov 2023	11 Feb 2022	13 Nov 2021	---
Machine Hours	2520	1045	500	---
Oil Hours	0	0	0	---
Oil Changed	Changed	Changed	Changed	---
Sample Status	NORMAL	NORMAL	NORMAL	---



OIL CONDITION

Visc @ 100°C	cSt	11.7	11.8	12.4	---
Oxidation (PA)	%	79	106	197	---



CONTAMINATION

Soot %	%	0	0	0	---
Nitration (PA)	%	83	93	103	---
Sulfation (PA)	%	58	70	109	---
Glycol	%	0.0	0.0	NEG	---
Fuel	%	<1.0	1.1	<1.0	---
Silicon	ppm	6	5	6	---
Sodium	ppm	4	4	1	---
Potassium	ppm	19	20	9	---



WEAR METALS

Iron	ppm	13	13	11	---
Copper	ppm	8	140	178	---
Lead	ppm	<1	5	6	---
Tin	ppm	<1	<1	<1	---
Aluminum	ppm	4	4	2	---
Chromium	ppm	<1	<1	<1	---
Molybdenum	ppm	55	63	43	---
Nickel	ppm	0	0	0	---
Titanium	ppm	0	0	<1	---
Silver	ppm	<1	<1	<1	---
Manganese	ppm	0	<1	<1	---
Vanadium	ppm	0	0	0	---



ADDITIVES

Calcium	ppm	882	904	1341	---
Magnesium	ppm	1095	1194	949	---
Zinc	ppm	1194	1193	874	---
Phosphorus	ppm	998	1010	757	---
Barium	ppm	<1	1	8	---
Boron	ppm	27	27	77	---

Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

Depot: ESECOQ
 Unique No: 5671245
 Signed: Kevin Marson
 Report Date: 06 Nov 2023



GRAPHS

